

WHAT IS CLAIMED IS:

1. A messaging system, comprising:  
a messaging gateway operable to receive  
messages from a remote messaging system and to construct  
transmittable messages including portions of the messages  
5 received from the remote messaging system;  
an RF transmission system coupled to the  
messaging gateway and operable to receive the  
transmittable messages from the messaging gateway system;  
10 a subscriber device operable to communicate  
using radio frequency transmissions with the RF  
transmission system and operable to receive the  
transmittable messages including portions of the messages  
received from the remote messaging system through the  
15 messaging gateway system and the transmission system;  
the subscriber device operable to generate  
commands and to transmit the commands to the RF  
transmission system;  
the RF transmission system operable to direct  
20 the commands from the subscriber device to the messaging  
gateway; and  
the messaging gateway system operable to  
translate the commands into a protocol understood by the  
remote messaging system and to transmit the translated  
25 command to the remote messaging system such that a user  
of the subscriber device can control the operation of the  
remote messaging system utilizing commands transmitted to  
the remote messaging system through the RF transmission  
system and the messaging gateway system.

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2. The messaging system of Claim 1 and further comprising:

a remote-controlled system coupled to a remote system controller;

5 the remote system controller operable to communicate using radio frequency transmissions with the RF transmission system;

10 the subscriber device operable to generate remote system commands and to transmit the remote system commands to the messaging gateway system through the RF transmission system;

15 the messaging gateway system operable to decode the remote system commands and to generate messages to the remote system controller responsive to the remote system command; and

the remote system controller operable to control the remote-controlled system responsive to the commands received from the messaging gateway system.

20 3. The messaging system of Claim 1 wherein the messaging gateway system is operable to assemble a message notification transmission responsive to the receipt of a message from a remote messaging system and transmit the message notification transmission to the subscriber device through the RF transmission system;

25 the subscriber device operable to receive and display information responsive to the receipt of the message notification transmission and to generate a message response transmission responsive to a selection of a user of the subscriber device; and

30 the messaging gateway system operable to receive the message response transmission and to instruct the remote messaging system to transmit a message to the messaging gateway system for transmission to the

subscriber device responsive to the receipt of the message response transmission.

4. The messaging system of Claim 1 wherein the subscriber device is operable to generate and transmit a request message requesting the subscriber's portfolio menu;

the messaging gateway system operable to receive the request message and to transmit a menu message to the subscriber device using the RF transmission system; and

the subscriber device operable to receive the menu message and to display a menu of options to a user of the subscriber device responsive to the receipt of the menu message.

5. The messaging system of Claim 1 wherein the messaging gateway system comprises:

a plurality of protocol converter modules coupled to an interface control module, the protocol converter modules operable to receive messages from remote messaging systems in protocols associated with the remote messaging systems and to convert the protocols to an internal message protocol understood by the interface control module;

a transaction control module operable to control and log transactions performed by the messaging gateway system;

a database handler module operable to organize messages and subscriber information used by the messaging gateway system;

a file server module operable to store messages and information processed by the messaging gateway system;

a message construction module operable to  
construct messages and commands for transmission using  
the RF transmission system and to construct command  
messages to be transmitted to remote messaging systems;  
5 and

an action processor module operable to decode  
packets and to instruct the remaining modules on actions  
to perform based on these packets.

10 6. A messaging system, comprising:

a messaging gateway operable to receive  
messages from a remote messaging system and to construct  
transmittable messages including portions of the messages  
received from the remote messaging system;

15 an RF transmission system coupled to the  
messaging gateway and operable to receive the  
transmittable messages from the messaging gateway system;

a subscriber device operable to communicate  
using radio frequency transmissions with the RF  
20 transmission system and operable to receive the  
transmittable messages including portions of the messages  
received from the remote messaging system through the  
messaging gateway system and the RF transmission system;

the subscriber device operable to generate  
25 commands and to transmit the commands to the RF  
transmission system;

the RF transmission system operable to direct  
the commands from the subscriber device to the messaging  
gateway system;

30 the messaging gateway system operable to  
translate the commands into a protocol understood by the  
remote messaging system and to transmit the translated  
command to the remote messaging system such that a user  
of the subscriber device can control the operation of the  
35 remote messaging system utilizing commands transmitted to

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the remote messaging system through the RF transmission system and the messaging gateway system;

a remote-controlled system coupled to a remote system controller;

5 the remote system controller operable to communicate using radio frequency transmissions with the RF transmission system;

10 the subscriber device operable to generate remote system commands and to transmit the remote system commands to the messaging gateway system through the RF transmission system;

15 the messaging gateway system operable to decode the remote system commands and to generate messages to the remote system controller responsive to the remote system command; and

20 the remote system controller operable to control the remote-controlled system responsive to the commands and to the transmissions received from the messaging gateway system.

7. The messaging system of Claim 6 wherein the messaging gateway system is operable to assemble a message notification transmission responsive to the receipt of a message from a remote messaging system;

25 the messaging gateway system further operable to transmit the message notification transmission to the subscriber device through the RF transmission system;

30 the subscriber device operable to receive and display information responsive to the receipt of the message notification transmission and to generate a message response transmission responsive to a selection of a user of the subscriber device; and

35 the messaging gateway system operable to receive the message response transmission and to instruct the remote messaging system to transmit a message to the

messaging gateway system for transmission to the subscriber device responsive to the receipt of the message response transmission.

- 5           8.    The messaging system of Claim 7 wherein the subscriber device is operable to generate a request message utilizing a unique transaction identifier programmed into the subscriber device or entered into the subscriber device;
- 10               the messaging gateway system operable to receive the request message and recognize the unique transaction I.D. as a request and to transmit a menu message to the subscriber device using the RF transmission system; and
- 15               the subscriber device operable to receive the menu message and to display a menu of options to a user of the subscriber device responsive to the receipt of the menu message.

9. A method of processing messages comprising the steps of:

receiving at a messaging gateway a message  
notification from a remote messaging system;

transmitting the message notification to a  
subscriber device through an RF transmission system;

transmitting a deliver message command in  
response to the message notification from the subscriber  
device to the messaging gateway through the RF  
transmission system;

transmitting a command to the remote messaging  
system from the messaging gateway requesting the message  
associated with the message notification;

receiving at the messaging gateway the message  
from the remote messaging system;

transmitting the message to the subscriber  
device through the RF transmission system;

transmitting a command associated with the  
message to the messaging gateway from the subscriber  
device through the RF transmission system; and

transmitting a command message including the  
command from the subscriber device to the remote  
messaging system through the messaging gateway.

10. The method of Claim 9 and further comprising  
the step of:

receiving at the messaging gateway system a  
command acknowledgment message from the remote messaging  
system;

transmitting the command acknowledgment to the  
subscriber device through the RF transmission system; and

displaying the command acknowledgment to a user  
of the subscriber device.

11. The method of Claim 9 and further comprising the step of:

generating at the subscriber device a message including a remote system command;

5 transmitting the remote system command to the messaging gateway system through the RF transmission system from the subscriber device;

10 transmitting a message from the message gateway system to a remote system controller through the RF transmission system instructing the remote system controller to perform the actions instructed by the command received from the subscriber device; and

15 controlling a remote-controlled system using the remote system controller responsive to the message received from the messaging gateway system.

12. A method of processing voice messages comprising the steps of:

20 receiving in a messaging gateway a voice message notification;

transmitting a page including the voice message notification to a subscriber device through a transmission system;

25 transmitting a voice message send command from the subscriber device to the messaging gateway;

retrieving the voice message from the remote messaging system into the messaging gateway;

30 transmitting the voice message from the messaging gateway to the subscriber device through the transmission system;

transmitting a command from the subscriber device to the messaging gateway associated with the processing of the voice message; and

35 transmitting the command from the messaging gateway to the remote messaging system such that the user

of the subscriber device can remotely command the operation of the remote messaging system.

13. The method of Claim 12 wherein the step of  
5 transmitting a command from the subscriber device to the messaging gateway system comprises the step of transmitting a command instructing the remote voicemail system to save the message.

10 14. The method of Claim 12 wherein the step of transmitting a command from the subscriber device to the messaging gateway system comprises the step of transmitting a command instructing the remote voicemail system to redirect the message and wherein the command  
15 message also includes an address of the intended recipient and a text message to be included with the redirected message.

15 15. The method of Claim 12 wherein the step of transmitting a command from the subscriber device to the messaging gateway system comprises the step of transmitting a command instructing the remote voicemail system to reply to the message and wherein the reply  
20 message also includes a text message to be included and sent to the intended recipient of the message.  
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16. A method of processing voice messages comprising the steps of:

30 receiving in a messaging gateway a voice message from a remote voice message system coupled to the messaging gateway system;

transmitting a page including the voice message notification page to a subscriber device through a transmission system;

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transmitting a voice message deliver command  
from the subscriber device to the messaging gateway;

transmitting the voice message from the  
messaging gateway to the subscriber device through the  
transmission system; and

transmitting a command from the subscriber  
device to the messaging gateway associated with the  
processing of the voice message.

17. The method of Claim 16 wherein the step of  
transmitting a command from the subscriber device to the  
messaging gateway system comprises the step of  
transmitting a command instructing the messaging gateway  
system to instruct the remote voice messaging system to  
save the message.

18. The method of Claim 16 wherein the step of  
transmitting a command from the subscriber device to the  
messaging gateway system comprises the step of  
transmitting a command instructing messaging gateway  
system to redirect the message and wherein the command  
message also includes an address of the intended  
recipient and a text message to be included with the  
redirected message.

19. The method of Claim 16 wherein the step of  
transmitting a command from the subscriber device to the  
messaging gateway system comprises the step of  
transmitting a command instructing the messaging gateway  
system to reply to the message and wherein the reply  
message also includes a text message to be included and  
sent to the intended recipient of the message.

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